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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/624,123 | 07/24/2000 | Roy Harold Mauger | 476-1933 | 6345 |

7590

11/06/2003

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| EXAMINER |
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EUGENE, WANDA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2666 | 3 |

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/624,123

Applicant(s)

MAUGER, ROY HAROLD

Examiner

Wanda Eugene

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-15 is/are rejected.
- 7) ☒ Claim(s) 7-9, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 0200 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) ✓
because they do not include the following reference sign(s) mentioned in the
description: 21 Fig 3. A proposed drawing correction or corrected drawings are required
in reply to the Office action to avoid abandonment of the application. The objection to
the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it is missing a period.
Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: missing ✓
period line, 3 page1. Appropriate correction is required.
4. The disclosure is objected to because of the following informalities: extra period ✓
line, 36 page2. Appropriate correction is required.
5. The disclosure is objected to because it contains an embedded hyperlink and/or ✓
other form of browser-executable code. Applicant is required to delete the embedded
hyperlink and/or other form of browser-executable code. See MPEP § 608.01.
6. The disclosure is objected to because of the following informalities: spelling, ✓
errors, page 3 line 6 "Highland" and page 7 line 11 "realize."

Appropriate correction is required.

7. The disclosure is objected to because of the following informalities: page 8 line 16 contains improper sentence structure, " is the manger 36 able to use CR-LDP ✓
embedded.... " is missing a subject.

Appropriate correction is required.

Claim Objections

8. Claims 3 and 7 objected to because of the following informalities: spelling errors claim 3 line 3 "there between" and claim 7 line 3 "realize." Appropriate correction is ✓
required.

9. Claim 10 objected to because of the following informalities: improper sentence ✓
structure, in which the phrase "is used frame mode", is improper. Appropriate correction
is required.

10. Claim 7 objected to because of the following informalities: missing a period. ~~==~~
Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

12. Claim 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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13. Claim 3 recites the limitation "said path is specified by identifying first and second real nodes and one or more abstract node there between" is confusing. It seems as if the applicants claim 3 is referring to abstract nodes, which are comprised of real nodes, in between the before mentioned real nodes. Appropriated correction is requested.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Sanzi et al.
(U.S. 6,477,166)

Sanzi teaches a communication system for switching MPLS packets and ATM cells in a network. Sanzi includes, MPLS connected to a core of ATM switches surrounded by IP routers.

16. Claims 2-4 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Kodialam et al. (U.S. 6,538,991).

Kodialam teaches a network of nodes (Nn) defining a network path interconnected via a set of links 101 Fig 1. Kodialam includes a network management system 105 Fig 1, to collect and distribute network topology information as in claim 2 and 11. Kodialam also teaches, column 1 line 25-55, a network with a hierarchical structure in which smaller networks are interconnected by larger networks, and at the highest level route packets are transferred between other such networks through the ingress and egress points of the network as in claim 3 and 12. Kodialam further teaches a constraint-based routing method utilized to define a network tunnel path as in claim 4 and 13.

17. Claim 10 rejected under 35 U.S.C. 102(e) as being anticipated by Sakamoto et al. (U.S. 6,633,571)

Sakamoto et al. teaches a plurality of networks utilizing Quality of Service via asynchronous transfer mode, in which ATM 53 Fig 11 is employed as the lower layer-processing unit. Sakamoto also teaches, MPLS as a hub conveyer for ISP 2-2 Fig 1.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 5 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Kodialam in view of Casey et al. (U.S. 6,205,488).

Kodialam discloses a network of nodes and a network management system whereby a network is defined by a constraint-based routing system. Kodialam does not disclose abstract nodes defined by IP address prefix and the core nodes within said abstract nodes containing such said prefix in their IP address as in applicant's claims 5 and 14. Casey et al. discloses a plurality of routers and plurality of routers associated with it a common VPN identifier Fig 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kodialam to include a common identifier such as taught by Casey et al. in order to effectively transport data through the network.

20. Claims 6 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Kodialam in view of Casey as applied to claim 5 above, and in further view of Hughes.

Kodialam discloses a network with a specified structure as described above. Casey discloses said network routers having a common identifier. The combination of Kodialam and Casey fails to disclose a management function for the management of virtual switches as disclosed by applicant's claims 6 and 15. Hughes teaches a virtual switch interface controllers 202 Fig 6 to establish modify and terminate connections. At the time of the invention it would have been obvious to a person of ordinary skill in the art to incorporate a function to maintain control of the resources of the virtual switches.

Allowable Subject Matter

21. Claims 7-9 and 16-17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Eugene whose telephone number is 703-305-8978. The examiner can normally be reached on M-F 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S Rao can be reached on 703-308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-3900.

we

Seema S. Rao
SEEMA S. RAO 11/3/03
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800